

APPENDIX A

RID=1105489063-30856-30166294485.BLASTQ4.

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

```
>gi|31795107|gb|AC005383.2| EF Homo sapiens chromosome 10 clone CIT967SK-1144G6 map 10q25.1, complete
sequence
length = 121774

Score = 1405 bits (709), Expect = 0.0
Identities = 747/753 (99%), Gaps = 5/753 (0%)
Strand = Plus / Plus

Query: 2614 ggattcttcgagncgcccctgaggcacatgggtccggtgcaggagggcagcagccgtatcc 2673
          |||
Sbjct: 78153 ggattcttcgagagcgcccctgaggcacatgggtccggtgcaggagggcagcagccgtatcc 78212

Query: 2674 cttccacgaactacagagagagcctgggacacgaatgggtgcttaccctctgggaatgctc 2733
          |||
Sbjct: 78213 cttccacgaactacagagagagcctgggacacgaatgggtgcttaccctctgggaatgctc 78272

Query: 2734 gtgcccagggctctttagaattgctgtcttcccgccgctggccaggacacacatctctactga 2793
          |||
Sbjct: 78273 gtgcccagggctctttagaattgctgtcttcccgccgctggccaggacacacatctctactga 78332

Query: 2794 gggaggagggatgctcccaactgacagccatgctgcttagagacagaaagcagctgactga 2853
          |||
Sbjct: 78333 gggaggagggatgctcccaactgacagccatgctgcttagagacagaaagcagctgactga 78392

Query: 2854 cccacaaacagatgctcttgaaaagctcttgatgctgtaagtaaaacacccactctctgtaccc 2913
          |||
Sbjct: 78393 cccacaaacagatgctcttgaaaagctcttgatgctgtaagtaaaacacccactctctgtaccc 78452

Query: 2914 gctgtgctcttctgagggctatgtcatctgcccaccccttcccttgaggatcaacaaggggctc 2973
          |||
Sbjct: 78453 gctgtgctcttctgagggctatgtcatctgcccaccccttcccttgaggatcaacaaggggctc 78512

Query: 2974 ctgaagacttaaaatttagcggcctgacgttctcttgacacacacacacacacacacacacac 3033
          |||
Sbjct: 78513 ctgaagacttaaaatttagcggcctgacgttctcttgacacacacacacacacacacacacac 78572

Query: 3034 gttgttgacacagcactgctccagcagagggccttaccagagcactcttggagcggcgag 3093
          |||
Sbjct: 78573 gttgttgacacagcactgctccagcagagggccttaccagagcactcttggagcggcgag 78632

Query: 3094 gtcacggcctctcaagatggaaagcagcagctcttccacctccctccagagacattctggat 3153
          |||
Sbjct: 78633 gtcacggcctctcaagatggaaagcagcagctcttccacctccctccagagacattctggat 78692

Query: 3154 gcattttgactgagctcctgaaggggggcttgagggaagctctgtgactctctggcgactgcc 3213
          |||
Sbjct: 78693 gcattttgactgagctcctgaaggggggcttgagggaagctctgtgactctctggcgactgcc 78751

Query: 3214 tttctgctgctggagagaccttggaagggctccagactg-aatgtgaccaaactaacacagct 3272
          |||
Sbjct: 78752 tttctgctgctggagagaccttggaagggctccagactg-aatgtgaccaaactaacacagct 78811

Query: 3273 tggtttgatgactgggggaggggctgagttgtgc-Atgggcccaggctctgga-gggctacgc 3330
          |||
Sbjct: 78812 tggtttgatgactgggggaggggctgagttgtgc-Atgggcccaggctctgga-gggctacgc 78870

Query: 3331 aaaaatcgctctgagctgctgagcagtgctccacc 3363
          |||
Sbjct: 78871 aaaaatcgctctgagctgctgagcagtgctccacc 78930
```

```
Score = 1140 bits (575), Expect = 0.0
Identities = 575/575 (100%)
Strand = Plus / Plus
```

```
Query: 1324 gccctgaagctgagccttggaatgcagggtcgacctccctctctgctggacagctcttgcg 1383
          |||
Sbjct: 72874 gccctgaagctgagccttggaatgcagggtcgacctccctctctgctggacagctcttgcg 72933

Query: 1384 aacacacacacacacacacacacacacacacacacacacacacacacacacacacacacacac 1443
```

RID=1105489063-30856-30166294485.BLASTQ4,

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

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- - - - -
Sbjct: 72974 ggcaccactctggagcggcttcttgcgggcacaaagcttctgtaagcggcttctgtgcgggc 72993
Query: 1444 gtgctgagcagagactctcgggcccagtcgggtgtggccacacacagcagggaagctgctg 1503
Sbjct: 72994 gtcgtgagcagagactctcgggcccagtcgggtgtggccacacacagcagggaagctgctg 72053
Query: 1504 gtcggcggatgctgtgaggagtagcaggatctgacctggctcggagcctcgatggc 1563
Sbjct: 73054 gtcggcggatgctgtgaggagtagcaggatctgacctggctcggagcctcgatggc 73113
Query: 1564 attccccctcggcgggtggccccacccctgacgggcagtgccctgcggcaggcggcagagcgt 1623
Sbjct: 73114 attccccctcggcgggtggccccacccctgacgggcagtgccctgcggcaggcggcagagcgt 73173
Query: 1624 ggccttcggggagcgcaccacaggacaggccagggaacggccacgtagagtggtggctttgctc 1683
Sbjct: 73174 ggccttcggggagcgcaccacaggacaggccagggaacggccacgtagagtggtggctttgctc 73233
Query: 1684 actgagtcacactccgaggatcaggttgcggggccagcgcgtcacgcaaggcgcgagag 1743
Sbjct: 73234 actgagtcacactccgaggatcaggttgcggggccagcgcgtcacgcaaggcgcgagag 73293
Query: 1744 ctgctccctgctgggtgttaggcagtcaggccctgcggggcagagctggaggagatcacaggc 1803
Sbjct: 73294 ctgctccctgctgggtgttaggcagtcaggccctgcggggcagagctggaggagatcacaggc 73353
Query: 1804 agcccaaaagcatgtgagtcggcttacttcggatcctcaggatctcgttcaacaaatccctgag 1863
Sbjct: 73354 agcccaaaagcatgtgagtcggcttacttcggatcctcaggatctcgttcaacaaatccctgag 73413
Query: 1864 ctgcagggggaagctgtgcagccggcagcggcagg 1898
Sbjct: 73414 ctgcagggggaagctgtgcagccggcagcggcagg 73448
```

Score = 1076 bits (543), Expect = 0.0
Identities = 553/555 (99%), Gaps = 1/555 (0%)
Strand = Plus / Plus

```
Query: 1895 cagggtgcccagacacaaagccttggaacctctgcttcatgttggacacctctgacctcagtac 1954
Sbjct: 75871 cagggtgcccagacacaaagccttggaacctctgcttcatgttggacacctctgacctcagtac 75930
Query: 1955 ggcccagagaatttctgctcagatgcagagctttgtgagaagctgtgacctccagtttgagg 2014
Sbjct: 75931 ggcccagagaatttctgctcagatgcagagctttgtgagaagctgtgacctccagtttgagg 75990
Query: 2015 tgaaccttgacgtgacacaggctcggccttggtggtgtatggcagccagggtgcagactgacct 2074
Sbjct: 75991 tgaaccttgacgtgacacaggctcggccttggtggtgtatggcagccagggtgcagactgacct 76050
Query: 2075 tcgggctggacacacacacacacccgggctgcgagtgctgcgggcatcagccaggccccc 2134
Sbjct: 76051 tcgggctggacacacacacacacccgggctgcgagtgctgcgggcatcagccaggccccc 76110
Query: 2135 acctaggctggg-tgggctcagccggcaccgcccctgctgcacatcttatgacaaagtgatga 2193
Sbjct: 76111 acctaggctggg-tgggctcagccggcaccgcccctgctgcacatcttatgacaaagtgatga 76170
Query: 2194 ccgtccagaggggtgcccggcctgggtgtccccaaagctgtggcggctgccacagggcggga 2253
Sbjct: 76171 ccgtccagaggggtgcccggcctgggtgtccccaaagctgtggcggctgccacagggcggga 76230
Query: 2254 gaggcgacagaggtatgcagcccttcttgcacagaAgctgagggaacaaatggcatctctgctc 2313
Sbjct: 76231 gaggcgacagaggtatgcagcccttcttgcacagaAgctgagggaacaaatggcatctctgctc 76290
Query: 2314 tggctcgtgggcgtggggcctgtcctaaagtgaagggtctgcggagggttcgcaaggctcccagg 2373
```

RID=1105489063-30856-30166294485.BLASTQ4.

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

Sbjct: 76291 |||
cggtcgtgggctggggccctgcttAagtgagggctctgaggaggttgcaaggctcccggg 76360

Query: 2374 attccctgattccacgtggcagcttacgcccagctgaggtaaccaccaggacgtgctcactg 2433
|||
Sbjct: 76361 attccctgattccacgtggcagcttacgcccagctgaggtaaccaccaggacgtgctcactg 76410

Query: 2434 agtggctgtgtggag 2448
|||
Sbjct: 76411 agtggctgtgtggag 76425

Score = 626 bits (316), Expect = e-176
Identities = 316/316 (100%)
Strand = Plus / Plus

Query: 2 acagtgtctcgggctgacccgctcggagggtgggtgacccgggtagaagtgaaagtacttt 61
|||
Sbjct: 26189 acagtgtctcgggctgacccgctcggagggtgggtgacccgggtagaagtgaaagtacttt 26248

Query: 62 tttattctgacagaccgggctgattgacttataaaacgcgaggggctctatgcacctcc 121
|||
Sbjct: 26249 tttattctgacagaccgggctgattgacttataaaacgcgaggggctctatgcacctcc 26308

Query: 122 ctggcggtagtctccctccgactctagccgggtcgggtcgtgctgctctctccaggagaga 181
|||
Sbjct: 26309 ctggcggtagtctccctccgactctagccgggtcgggtcgtgctgctctctccaggagaga 26368

Query: 182 caaacaggctgtcccaagtgtagccgggccccgggcgcctctctgtagatcccgtagcgc 241
|||
Sbjct: 26369 caaacaggctgtcccaagtgtagccgggccccgggcgcctctctgtagatcccgtagcgc 26428

Query: 242 cccctggccccgagccggcgggggtctgtgagtagagccggggcaccgagcgtcgggt 301
|||
Sbjct: 26429 cccctggccccgagccggcgggggtctgtgagtagagccggggcaccgagcgtcgggt 26488

Query: 302 cgcgcgtctctctccg 317
|||
Sbjct: 26489 cgcgcgtctctctccg 26504

Score = 391 bits (197), Expect = e-105
Identities = 197/197 (100%)
Strand = Plus / Plus

Query: 699 agggagggtgacaggagacggaaacttgcctgaaatacccttcgcacagggttgccctgg 758
|||
Sbjct: 59676 agggagggtgacaggagacggaaacttgcctgaaatacccttcgcacagggttgccctgg 59735

Query: 759 aggcagaaatgcttctgtgccccagatccctcatcatgctcactgatgggaagtcccaggg 818
|||
Sbjct: 59736 aggcagaaatgcttctgtgccccagatccctcatcatgctcactgatgggaagtcccaggg 59795

Query: 819 ggatgtggcactgccatccaagcagctgaaggaaagggtgtcactgtgcttctgtggg 878
|||
Sbjct: 59796 ggatgtggcactgccatccaagcagctgaaggaaagggtgtcactgtgcttctgtggg 59855

Query: 879 ggtcaggcttcccagggt 895
|||
Sbjct: 59856 ggtcaggcttcccagggt 59872

Score = 335 bits (169), Expect = 4e-88
Identities = 169/169 (100%)
Strand = Plus / Plus

RID=1105489063-30856-30166294485.BLASTQ4,

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

Query: 2447 agaagccaagcagcagcgaacccctctgcaaacccagcccgctgcatgaatgagggcagctg 2506
|||||
Sbjct: 77174 agaagccaagcagcagcagcgaacccctctgcaaacccagcccgctgcatgaatgagggcagctg 77233

Query: 2507 cgtccctgcagaatgggagctaccgctgcaagtgccgggatggctgggagggcccccactg 2566
|||||
Sbjct: 77234 cgtccctgcagaatgggagctaccgctgcaagtgccgggatggctgggagggcccccactg 77293

Query: 2567 cgagaaccgtgagtgaggctccttgcctctgtatgtgtgagccagggatgg 2615
|||||
Sbjct: 77294 cgagaaccgtgagtgaggctccttgcctctgtatgtgtgagccagggatgg 77342

Score = 272 bits (137), Expect = 5e-69
Identities = 137/137 (100%)
Strand = Plus / Plus

Query: 891 caggtgggagggagctgcatgcactggccagcgagccttagagggcaacacgctactctggc 950
|||||
Sbjct: 64847 caggtgggagggagctgcatgcactggccagcgagccttagagggcaacacgctactctggc 64906

Query: 991 tgagcaggtggaggatgccaccaacgggctcttccagcaccctcagcagctcggccatctg 1010
|||||
Sbjct: 64907 tgagcaggtggaggatgccaccaacgggctcttccagcaccctcagcagctcggccatctg 64966

Query: 1011 ctccagcgccacgcccag 1027
|||||
Sbjct: 64967 ctccagcgccacgcccag 64983

Score = 270 bits (136), Expect = 2e-68
Identities = 136/136 (100%)
Strand = Plus / Plus

Query: 1025 cagactgcagggctcgaggctcaccctcgtgagcacaggacgctggagatggctccggagc 1084
|||||
Sbjct: 65652 cagactgcagggctcgaggctcaccctcgtgagcacaggacgctggagatggctccggagc 65711

Query: 1085 tcgctggcgaatgccctatgtctggagaggatcgoggcggaaccttgcgggtgcttggctgac 1144
|||||
Sbjct: 65712 tcgctggcgaatgccctatgtctggagaggatcgoggcggaaccttgcgggtgcttggctgac 65771

Query: 1145 actgtccctccacag 1160
|||||
Sbjct: 65772 actgtccctccacag 65787

Score = 270 bits (136), Expect = 2e-68
Identities = 136/136 (100%)
Strand = Plus / Plus

Query: 455 tgatgtggctgctcggctgcagtggaacatcatgtttctgttagatgggtctaacagcgtcg 514
|||||
Sbjct: 41851 tgatgtggctgctcggctgcagtggaacatcatgtttctgttagatgggtctaacagcgtcg 41910

Query: 515 ggaaggaggagctctgaagggtccaaagcactttgccatccacagctcgtgagggctcggaca 574
|||||
Sbjct: 41911 ggaaggaggagctctgaagggtccaaagcactttgccatccacagctcgtgagggctcggaca 41970

Query: 575 tcagctcccagaggggt 590
|||||
Sbjct: 41971 tcagctcccagaggggt 41986

RID=1105489063-30856-30166294485.BLASTQ4,

<http://www.ncbi.nlm.nih.gov/BLAST/Blast.cgi>

Score = 220 bits (111), Expect = 2e-53
Identities = 111/111 (100%)
Strand = Plus / Plus

Query: 588 ggtcagagtgggagcattccagttcagttccactccctcctcctggaaattcccttggattc 647
|||||
Sbjct: 48121 ggtcagagtgggagcattccagttcagttccactccctcctcctggaaattcccttggattc 48180

Query: 648 attttcaacccaacaggaagtgaaggcaagaaatcaaggagatggctttcaa 698
|||||
Sbjct: 48181 attttcaacccaacaggaagtgaaggcaagaaatcaaggagatggctttcaa 48231

Score = 218 bits (110), Expect = 7e-53
Identities = 110/110 (100%)
Strand = Plus / Plus

Query: 1215 agggccctgtgacttcgagccctgccagaattggaggacacargtctccagaaggactgga 1274
|||||
Sbjct: 71797 agggccctgtgacttcgagccctgccagaattggaggacacargtctccagaaggactgga 71856

Query: 1275 cggctaccagtcgctctgcccgcctggcctttggaggagggttaactgtg 1324
|||||
Sbjct: 71857 cggctaccagtcgctctgcccgcctggcctttggaggagggttaactgtg 71906

Score = 153 bits (77), Expect = 3e-33
Identities = 77/77 (100%)
Strand = Plus / Plus

Query: 378 agtgcctccctctctctccctccaggaagtccatgtatgcaaaagaaacctcgggaagat 437
|||||
Sbjct: 40585 agtgcctccctctctctccctccaggaagtccatgtatgcaaaagaaacctcgggaagat 40644

Query: 438 tccagctgccagcaaaa 454
|||||
Sbjct: 40645 tccagctgccagcaaaa 40661

Score = 117 bits (59), Expect = 2e-22
Identities = 59/59 (100%)
Strand = Plus / Plus

Query: 1159 agctggaaagagagtgtccctaacccacccctgcttcttctacaggaccactgcccagg 1217
|||||
Sbjct: 69450 agctggaaagagagtgtccctaacccacccctgcttcttctacaggaccactgcccagg 69508

Score = 117 bits (59), Expect = 2e-22
Identities = 62/63 (98%)
Strand = Plus / Plus

Query: 317 gttatctcaacatgccccctccctgttctgtggaggccgtctgtgtcttctctgcttccca 376
|||||
Sbjct: 35620 gttatctcaacatgccccctccctgttctgtggaggccgtctgtgtcttctctgcttccca 35698

Query: 377 gag 379
|||
Sbjct: 35699 gag 35701